

substitute --may be necessary--;

line 22, after "schedule", insert --,--;

delete "the" (third occurrence) and

substitute --a--.

IN THE CLAIMS

Please amend the claims as follows:

1. (Amended) A method for scheduling a complex activity that [uses consumable resources and] is governed by a set of pre-defined constraints including consumable resource constraints, wherein an unacceptable schedule exists for the activity, the method comprising the steps of:

establishing the unacceptable schedule as a current schedule;

calculating a score for the current schedule;

repairing one or more [of the] constraint violations of the current schedule by modifying the current schedule;

determining a revised schedule from the schedule modification or modifications made by the constraint violation repair or repairs;

calculating a score for the revised schedule;

selecting one of the revised schedule or the current schedule as [the] a new current schedule based upon a comparison of the score of the revised schedule and the score of the current schedule;

repeating, until a predetermined condition is met, the steps of repairing one or more [of the] constraint

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concl.

violations of the current schedule, determining a revised schedule, calculating a score for the revised schedule, and selecting one of the revised schedule or the current schedule as the new current schedule; and  
selecting one of the revised schedules as the final schedule.

A4

6. (Amended) A method as in Claim 1, wherein the score is a function of the relative importance of each constraint and the degree of violation, if any, of each constraint.

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A5

12. (Amended) A system for scheduling a complex activity that ~~uses consumable resources and~~ is governed by a set of pre-defined constraints including consumable resource constraints, wherein an unacceptable schedule exists for the activity, comprising:

a memory device, wherein:

the memory device is capable of storing an unacceptable initial schedule that is supplied to the system;

the memory device stores information regarding each of the constraints; and

the memory device is capable of storing one or more revised schedules produced by the system; and  
a processing device, wherein:

the processing device is capable of calculating a score for each schedule;

the processing device is capable of repairing one or more constraint violations for each schedule by modifying the schedule;

the processing device is capable of determining each revised schedule from the schedule modification or modifications made by the constraint violation repair or repairs;

the processing device is capable of selecting one of the revised schedule or the current schedule as ~~[the]~~ a new current schedule based upon a comparison of the score of the revised schedule and the score of the current schedule; and

the processing device is capable of selecting one of the ~~[revised]~~ schedules as the final schedule determined by the system.

[Please enter the following new claims:

17 19. A method as in Claim 1, wherein the set of pre-defined constraints further includes reusable resource constraints.

20. A computer readable medium encoded with one or more computer programs for enabling scheduling of a complex activity that is governed by a set of pre-defined constraints including consumable resource constraints, comprising:

instructions for establishing an unacceptable initial schedule as a current schedule;

instructions for calculating a score for the current schedule;

instructions for repairing one or more constraint violations of the current schedule by modifying the current schedule;

instructions for determining a revised schedule from the schedule modification or modifications made by the constraint violation repair or repairs;

instructions for calculating a score for the revised schedule;

instructions for selecting one of the revised schedule or the current schedule as a new current schedule based upon a comparison of the score of the revised schedule and the score of the current schedule;

instructions for causing repetition of, until a predetermined condition is met, the instructions for repairing one or more constraint violations of the current schedule, the instructions for determining a revised schedule, the instructions for calculating a score for the revised schedule, and the instructions for selecting one of the revised schedule or the current schedule as the new current schedule; and

instructions for selecting one of the revised schedules as the final schedule.

#### IN THE ABSTRACT

At line 28, delete "previously used" and substitute